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09/924,325	08/08/2001	Peter John D. Wickham	3869/012	3579

7590

05/22/2003

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EXAMINER

WEISS JR, JOSEPH FRANCIS

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/924,325

Applicant(s)

Wickham

Examiner

Joseph Weiss

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Aug 8, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Aug 8, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other:

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## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the weighting assignment member of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the obstruction detector of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sampler of claim 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the comparator of claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the signal generator of claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: weighting assignment member, comparator, sampler, obstruction detector, Signal generator.

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***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruenke (US 5549106) in view of Rapoport (US 5803066).

Gruenke substantially discloses the instant application's claimed invention (see fig 18, the admittance embodiment) to include a gas source (18, fig 3) fully capable of selectively supplying gas to a user under pressure, a flow sensor 1802 for sensing flow and generating a flow signal indicative of gas flow, an obstruction detector (1800) for detecting an obstruction based upon a flow signal and generating an obstruction signal and a controller (20, fig 3) arranged to control the operation of said gas source and coupled to said flow sensor, receiving said signals and altering operation in response to said signals, but does not explicitly disclose a weight assigning member to assign weighting to different components of the flow signal. However, Rapoport disclose such (microprocessor 80, col. 7 line 50 to col.12 line 60, see specifically col. 10 lines 1-10 & col. 11 lines 12-26). The references are analogous since they are from the same field of endeavor, the respiratory arts. At the time the instant application's invention was made, it would have been obvious to one of ordinary skill in the art to have taken the features of Rapoport and

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used them with the device of Gruenke. The suggestion/motivation for doing so would have been to render optimal/more accurate pressure support to resolve obstructive events. Therefore it would have been obvious to combine the references to obtain the instant application's claimed invention.

Furthermore, such a feature is old and well known in the art, and one of skill in the art would consider such to amount to a matter of mere obvious and routine choice of design, rather than constitute a patently distinct inventive step, barring a convincing showing of evidence to the contrary.

In regards to claim 2, the suggested device is fully capable of and does select sections of a breathing pattern, e.g. a single breath (See fig 19 of Gruenke).

In regards to claim 3, the suggested device's flow sensor inherently has a "sampler" to the extent applicant has a "sampler" (interpreted as the sensor taking a reading of flow and generating a signal indicative of the reading since no physical aliquot or "sample" of gas is occurring) and is further capable of assigning a weighing of the factors of the "sample's" signals.

In regards to claim 4, the suggested device's "samples" have amplitudes and the weighting establishable upon such.

In regards to claim 5, the suggested device's "samples" have time positions and the weighting establishable upon such.

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In regards to claim 6, the rejection to claim 1 is herein incorporated by reference and furthermore has a signal generator (1812) that generates a signal based upon weighted values. (Note the generation of an admittance signal therefrom to microcontroller 802).

In regards to claim 7, the rejection to claim 1 is herein incorporated by reference and furthermore has a mask (14)

In regards to claim 8, the suggested device discloses a comparator (1812) to compare weighted average signals to a threshold and generating an obstruction signal (the admittance signal).

In regards to claim 9, the suggested device's flow sensor inherently has a "sampler" to the extent applicant has a "sampler" (interpreted as the sensor taking a reading of flow and generating a signal indicative of the reading since no physical aliquot or "sample" of gas is occurring) and is further capable of assigning a weighing of the factors of the "sample's" signals.

In regards to claim 10, the suggested device's "samples" have amplitudes and the weighting establishable upon such.

In regards to claims 11-13, the suggested device is fully capable of basing weighting upon amplitudes being above or below pre-determined values, correlating one weighing value with amplitudes below the value and another with amplitudes above the value and where one weighting factor is diminutive relative to the other.

In regards to claim 14, the suggested device's "samples" have time positions and the weighting establishable upon such.

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In regards to claim 15- 17, the suggested device is fully capable of basing weighting upon amplitudes being above or below pre-determined values, correlating one weighing value with amplitudes below the value and another with amplitudes above the value and where one weighting factor is diminutive relative to the other.

In regards to claim 18, the suggested device is fully capable of and does select sections of a breathing pattern, e.g. a single breath (See fig 19 of Gruenke).

In regards to claim 19, the suggested device is fully capable of and does select sections of a breathing pattern, e.g. an inspiration period (See fig 19 of Gruenke).

In regards to claim 20, the suggested device is fully capable of and does select sections of a breathing pattern, e.g. a mid-portion of said inspiration period (See fig 19 of Gruenke).

In regards to method claims 21-40, one of ordinary skill in the art would appreciate that the method steps claimed in the instant application would naturally flow from the device disclosed in the prior art as noted above and therefore are rejected herein above with respect to claims 1-20.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6457472, 6427689, 6398739, 6367474, 6363933, 6345619, 6213119, 5954050, 5740795, 5551419, 5535738

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph F. Weiss, Jr., whose telephone number is (703) 305-0323. The Examiner can normally be reached from Monday-Friday from 8:30 AM to 4:30 PM.

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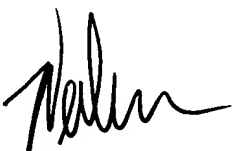
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Weilun Lo, can be reached at telephone number (703) 308-2702. The official fax number for this group is (703) 305-3590 or x3591.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858.



J. Weiss

May 14, 2003



**WEILUN LO**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**